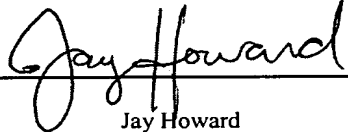


IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: David N. Edwards, et al.  
Date Filed: March 26, 2004  
Title: ADJUSTABLE SENSITIVITY, GENETIC  
MOLECULAR INTERACTION SYSTEMS,  
INCLUDING PROTEIN-PROTEIN INTERACTION  
SYSTEMS FOR DETECTION AND ANALYSIS

MAIL STOP PATENT APPLICATION  
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Jay Howard

Dear Sir:

**INFORMATION DISCLOSURE STATEMENT**

Applicant respectfully requests, pursuant to 37 C.F.R. §§1.56, 1.97 and 1.98, that the references listed on the attached PTO-1449 form, and previously cited in U.S. Patent Application Serial No. 09/680,738, entitled "*Adjustable Sensitivity, Genetic Molecular Interaction Systems, Including Protein-Protein Interaction Systems for Detection and Analysis*," filed October 6, 2000, be considered and cited in the examination of the above-identified continuation application. Pursuant to 37 C.F.R. § 1.98(d), copies of the references are not being furnished. Furthermore, pursuant to 37 C.F.R. §§1.97(g) and (h), no representation is made that these references are material to the patentability of the present application.

Applicant believes no fees are due for this Information Disclosure Statement, however, the Commissioner is hereby authorized to charge any fees to Deposit Account No. 50-2148 of Baker Botts L.L.P. in order to effectuate this filing.

Respectfully submitted,

BAKER BOTTS L.L.P.  
Attorneys for Applicant



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**FORM PTO-1449**U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(Use several sheets if necessary)*

Attorney's Docket Number

068660.0126

Serial Number

Unknown

Applicant

Edwards et al.

Filing Date

Group

Unknown

**U. S. PATENT DOCUMENTS**

EXAM INIT.	PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

**FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION**

EXAM INIT.	DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	Translation	
						YES	NO

**OTHER MATERIALS***(Including, Author, Title, Date, Relevant Pages, Place of Publication. \*\*)*

EXAM INIT.		
aa	Ammerer, G.; 1983. Expression of genes in yeast using the ACDI promoter. Methods in Enzymol. 101, 192-201.	
ab	Aronheim, A.; Zandi, E.; Hennemann, H.; Elledge, S. J.; and Karin, M.; 1997. Isolation of an AP-1 Repressor by a Novel Method for Detecting Protein-Protein Interactions. Mol. Cell. Biol. 17, 3094-3102.	
ac	Bai, C.; and Elledge, S. J.; 1997. Gene Identification Using the Yeast Two-Hybrid System. Methods Enzymol. 283, 141-156.	
ad	Baldwin, A. S.; 1996. The NF- $\kappa$ B and I $\kappa$ B Proteins: New Discoveries and Insights. Annu. Rev. Immunol. 14, 649-681.	
ae	Bartel, P.; Chien, C.; Sternglanz, R.; and Fields, S.; 1993. Elimination of False Positives That Arise in Using the Two-Hybrid System. Biotechniques 14, 920-924.	
af	Berridge, P.; Lipp, P.; and Bootman, M.; 1999. Calcium signalling. Curr. Biology 9, R157-R159.	
ag	Brachmann, R. K.; and Boeke, J. D.; 1997. Tag games in yeast: the two-hybrid system and beyond. Curr. Opin. Biotechnol. 8, 561-568.	
ah	Bunker, C. A.; and Kingston, R. E.; 1995. Identification of a cDNA for SSRP1, an HMG-box protein, by interaction with the c-Myc oncoprotein in a novel bacterial expression screen. Nucleic Acid Res. 23, 269-276.	

EXAM INIT.		<b>OTHER MATERIALS</b> <i>(Including, Author, Title, Date, Relevant Pages, Place of Publication)</i>
	ba	Bustos, S. A.; and Schleif, R. F.; 1993. Functional domain of the AraC protein. Proc. Natl. Acad. Sci. 90, 5368-5642.
	bb	Cantwell, B. A.; Brazil, G.; Murphy, N.; and McConnell, D. J.; 1986. Comparison of expression of the endo- $\beta$ -1,3-1,4-glucanase gene from <i>Bacillus subtilis</i> in <i>Saccharomyces cerevisiae</i> from the CYC1 and ADH1 promoters. Curr. Genetics 11, 65-70.
	bc	Edwards, D. N.; Towb, P.; and Wasserman, S. A.; 1997. An activity-dependent network of interactions links Rel protein Dorsal with its cytoplasmic regulators. Development 124, 3855-3864.
	bd	Estojak, J.; Brent, R.; and Golemis, E. A.; 1995. Correlation of Two-Hybrid Affinity Data with In Vitro Measurements. Mol. Cell. Biol. 15, 5820-5829.
	be	Fearon, E. R.; Finkel, T.; Gillison, M. L.; Kennedy, S. P.; Casella, J. F.; Tomaselli, G. F.; Morrow, J.S.; and Van Dang, C.; 1992. Karyoplasmic interaction selection strategy: A general strategy to detect protein-protein interactions in mammalian cells. Proc. Natl. Acad. Sci. 89, 7958-7962.
	bf	Fields, S.; and Song, O.; 1989. A novel genetic system to detect protein-protein interactions. Nature 340, 245-246.
	bg	Finley, R. L.; and Brent, R.; 1997. Two-hybrid analysis of genetic regulatory networks. In: The Yeast Two-Hybrid System. Ed. Bartel, P. L.; Fields, S.; pp. 197-214, Oxford Univ. Press.
	bh	Gaido, K. W.; Leonard, L. S.; Lovell, S.; Gould, J. C. babai, D.; Portier, C. J.; and McDonell, D. P.; 1997. Evaluation of chemicals with endocrine modulating activity in a yeast based steroid hormone receptor gene transcription assay. Toxic and App. Pharm. 143, 205-212.
	bi	Guarente, L.; 1983. Yeast Promoters and <i>lacZ</i> Fusions Designed to Study Expression of Cloned Genes in Yeast. Methods in Enzymol. 101, 181-191.
	bj	Guarente, L.; and Ptashne, M.; 1981. Fusion of <i>Escherichia coli lacZ</i> to the cytochrome <i>c</i> gene of <i>Saccharomyces cerevisiae</i> . Proc. Natl. Acad. Sci. 78, 2199-2203.
	bk	Guarente, L.; Yocum, R. R.; and Gifford, P.; 1982. A <i>GAL10</i> hybrid yeast promoter identifies the <i>GAL4</i> regulatory region as an upstream site. Proc. Natl. Acad. Sci. 79, 7410-7414.
	bl	Gyuris, J.; Golemis, E.; Chertkov, H; and Brent, R.; 1993. Cdi1, a Human G1 and S Phase Protein Phosphatase That Associates with Cdk2. Cell 75, 791-803.
	bm	Hays, L. B.; Chen, Y-S. A.; and Hu, J. C.; 2000. Two-hybrid screen for characterization of protein-protein interactions in <i>E. coli</i> . Biotechniques, 29, 288-294.
	bn	James, P.; Halladay, J.; and Craig, E. A.; 1996. Genomic Libraries and a Host Strain Designed for Highly Efficient Two-Hybrid Selection in Yeast. Genetics 144, 1425-1436.
	bo	Kliwer, S. A.; Lehmann, J. M.; and Willson, T. M.; 1999. Orphan Nuclear Receptors: Shifting Endocrinology into Reverse. Science 284, 757-760.
	bp	Kralli, A.; Bohen, S. P.; and Yamamoto, K. R.; 1995. LEM1, an ATP-binding-cassette transporter, selectively modulates the biological potency of steroid hormones. Proc. Natl. Acad. Sci. 92, 4701-4705.

EXAM INIT.		<b>OTHER MATERIALS</b> <i>(Including, Author, Title, Date, Relevant Pages, Place of Publication. **)</i>
	ca	Li, J. J.; and Herskowitz, I.; 1993. Isolation of <i>ORC6</i> , a Component of the Yeast Origin Recognition Complex by a One-Hybrid System. <i>Science</i> 262, 1870-1874.
	cb	Mangelsdorf, D. J.; and Evans, R. M.; 1995. The RXR Heterodimers and Orphan Receptors. <i>Cell</i> 83, 841-850.
	cc	Mangus, D. A.; Amrani, N.; and Jacobson, A.; 1998. Pbp1p, a Factor Interacting with <i>Saccharomyces cerevisiae</i> Poly(A)-Binding Protein, Regulates Polyadenylation. <i>Mol. Cell. Biol.</i> 18, 7383-7396.
	cd	Martinez, A.; Sparks, C.; Drayton, P.; Thompson, J.; Greenland, A.; and Jepson, I.; 1999. Creation of ecdysone receptor chimeras in plants for controlled regulation of gene expression. <i>Mol. Gen. Genet.</i> 261, 546-552.
	ce	Mendelsohn, A. R.; and Brent, R.; 1994. Applications of interaction traps/two-hybrid systems to biotechnology research. <i>Curr. Opin. Biotechnol.</i> 5, 482-486.
	cf	Mercurio, F.; and Manning, A. M.; 1999. Multiple signals converging on NF- $\kappa$ B. <i>Curr. Opin. Cell. Biol.</i> 11, 226-232.
	cg	Moghal, N.; and Sternberg, P. W.; 1999. Multiple positive and negative regulators of signaling by the EGF-receptor. <i>Curr. Opin. Cell. Biol.</i> 11, 190-196.
	ch	Phizicky, E. M.; and Fields, S.; 1995. Protein-Protein Interactions: Methods for Detection and Analysis. <i>Microbiological Reviews</i> , Vol. 59k, No. 1, pp. 94-123.
	ci	Picard, D.; Khursheed, B.; Garabedian, M. J.; Fortin, M. G.; Lindquist, S.; and Yamamoto, K. R.; 1990. Reduced levels of hsp90 compromise steroid receptor action <i>in vivo</i> . <i>Nature</i> 348, 166-168.
	cj	Rossi, F. M.V.; and Blau, H. M.; 1998. Recent advances in inducible gene expression systems. <i>Curr. Opin. Biotechnol.</i> 9, 451-456.
	ck	Schena, M.; Picard, D.; and Yamamoto, K. R.; 1991. Vectors for Constitutive and Inducible Gene Expression in Yeast. <i>Methods in Enzymol.</i> 94, 389-398.
	cl	Schena, M.; and Yamamoto, K. R.; 1988. Mammalian Glucocorticoid Receptor Derivatives Enhance Transcription in Yeast. <i>Science</i> 241, 965-967.
	cm	SenGupta, D. J.; Zhang, B.; Kraemer, B.; Pochart, P.; Fields, S.; and Wickens, M.; 1996. A three-hybrid system to detect RNA-protein interactions <i>in vivo</i> . <i>Proc. Natl. Acad. Sci.</i> 93, 8496-8501.
	cn	Serebriiskii, I.; Khazak, V.; and Golemis E. A.; 1999. A two-hybrid dual system to discriminate specificity of protein interactions. <i>J. Biol. Chem.</i> 274(24), 17080-17087.
	co	Shioda, T.; Andriole, S.; Yahata, T.; and Isselbacher, K. J.; 2000. A green fluorescent protein-reporter mammalian two-hybrid system with extrachromosomal maintenance of a prey plasmid: Application to <sup>interaction</sup> screening. <i>Proc. Natl. Acad. Sci.</i> 97, 5220-5224.
	cp	Vasavada, H. A.; Ganguly, S.; Germino, F. J.; Wang, Z. X.; and Weissman, S. M.; 1991. A contingent replication assay for the detection of protein-protein interactions in animal cells. <i>Proc. Natl. Acad. Sci.</i> 88, 10686-10690.

EXAM INIT.		<b>OTHER MATERIALS</b> (Including, Author, Title, Date, Relevant Pages, Place of Publication. **)
	da	West, R. W., Jr.; Yocum, R. R.; and Ptashne, M.; 1984. <i>Saccharomyces cerevisiae</i> GAL1-GAL10 Divergent Promoter Region: Location and Function of the Upstream Activating Sequence UAS <sub>G</sub> . Mol. Cell. Biol. 4, 2467-2478.
	db	Yang, M; Wu, Z.; and Fields, S.; 1995. Protein-peptide interactions analyzed with the yeast two-hybrid system. Nucleic Acid Res. 23, 1152-1156.
	dc	Young, K. H.; 1998. Yeast Two-Hybrid: So Many Interactions, (in) So Little Time.... Biology of Reproduction 58, 302-311.
EXAMINER		DATE CONSIDERED
EXAMINER: Initial if citation considered, whether or not citation is in conformance and not considered. Include copy of this form with next communication to applicant. **Place of Publication refers to name of publication in which the information was published.		

<b>PTO-1449</b>  <b>Information Disclosure Citation in an Application</b>			Application No.		Applicant(s)		
			Unknown		Edwards et al.		
			Docket Number		Group Art Unit		Filing Date
		068660.0126		Unknown			
<b>U.S. PATENT DOCUMENTS</b>							
		<b>DOCUMENT NO.</b>	<b>DATE</b>	<b>NAME</b>	<b>CLASS</b>	<b>SUBCLASS</b>	<b>FILING DATE</b>
	A.	5925523	7/20/99	Dove et al.	435	6	8/26/97
	B.	5965368	10/1999	Vidal et al.			
	C.						
	D.						
	E.						
	F.						
	G.						
	H.						
	I.						
	J.						
	K.						
	L.						
<b>FOREIGN PATENT DOCUMENTS</b>							
		<b>DOCUMENT NO.</b>	<b>DATE</b>	<b>COUNTRY</b>	<b>CLASS</b>	<b>SUBCLASS</b>	<b>TRANSLATION</b>
							YES NO
	M.	97/31113	8/28/97	WO	C12N	15/12	X
	N.						
	O.						
<b>NON-PATENT DOCUMENTS</b>							
		<b>DOCUMENT (Including Author, Title, Source, and Pertinent Pages)</b>					<b>DATE</b>
	P.	International Search Report PCT/US 00/27677					2/15/02
	Q.	Findley et al. (1997) "Two-hybrid of genetic regulatory networks" in The Yeast Two-Hybrid System, Bartel et al eds., Oxford University Press, pp. 197-214					
	R.	Schena et al. (1991) Methods in Enzymology 194:389-398					
	S.						
EXAMINER					DATE CONSIDERED		
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.							